

(5) A copy of any renewal application submitted to the FCC and not yet acted upon (see § 95.733);

(6) A copy of the FCC consent to a licensee corporation's change in its corporate control (see § 95.731).

§ 95.769 Station inspection.

If an authorized FCC representative wishes to inspect any station or station records, the licensee or station operator must make the station available for inspection.

TRANSMITTER CONTROL

§ 95.771 Station control point.

(a) Each base station must have a control point where the station operator can communicate messages and control the station by:

(1) Causing it to transmit and to cease transmitting;

(2) Taking all necessary and reasonable precautions to assure that unauthorized or improper operations do not occur;

(3) Refraining from making any transmissions that may have the reasonably anticipated effect of causing improper operation of others' equipment; and

(4) In cases of recurrent interference, obeying any Commission-imposed additional requirements or restrictions designed to mitigate such interference.

(b) The control point for each station must be at that station, unless the license authorizes the station to be controlled from a remote point.

§ 95.773 Controlling a station from a remote point.

(a) A station operator may control a base station from a remote point through a control link (a connection between the remote control point and the remotely controlled station). The control link must be either:

(1) A wireline control link solely for purposes of transmitter control for messages which are both conveyed by a wireline control link and transmitted by a base station; or

(2) A radio control link.

(b) The remotely controlled station must not make unauthorized transmissions.

(c) The station operator must perform the required duties (see 95.761) when controlling the station from a remote point in the same manner as when controlling it locally at the station point. Should the control link fail to function so that the station operator cannot perform the required duties, the remotely controlled station must not transmit.

(d) The FCC does not consider a station as being remotely controlled if the connection is a wireline or mechanical control link, and the station and its control point are both:

(1) On the same vehicle; or

(2) At the same street address, or within 152 meters (500 feet) of each other.

(e) Any device used to establish a wireline control link which is attached to the public switched telephone network must be registered with the FCC and must comply with the standards incorporated in a registration program to protect the public switched telephone network from harm (see Part 68 of the FCC Rules).

§ 95.775 Interconnection.

No station in the PELTS may be interconnected to the public switched telephone network. Wireline or radio circuits or links furnished by common carriers, which are used by licensees or other authorized persons for transmitter control (including dial-up transmitter control circuits) or as an integral part of an authorized private internal system of communication are not considered to be interconnected for purposes of this section.

FOOTNOTES

¹ For example, the National Sporting Goods Association reports that participation by individuals over age 7 in skiing, backpacking, mountain climbing, and hunting increased from 48.3 million to 55.6 million for the period of 1984 to 1988, *Sports Participation 1988*.

² For the National Park Service, for example, the number of search and rescue incidents increased twofold, from 1500 to 2900, between 1978 and 1988. According to The Interagency Committee on Search and Rescue (ICSAR), "[t]his only gives a glimpse into the extent of the concern since no one has an accurate picture of the problem." *Final Report of ICSAR Ad Hoc Study Group on Personal Locating Beacons*, (ICSAR Final Report), January 17, 1989, p. 3.

³ *New York Times*, May 16, 1986, 1.

⁴ *The Washington Post*, February 21, 1987, A7.

⁵ The exception is Class "C" EPIRBs which operate on the maritime VHF frequencies 156.750 and 156.800 MHz.

⁶ See *Report and Order*, PR Docket No. 86-424, 3 FCC Rcd 5406 (1988).

⁷ SRSAT stands for search and rescue satellite-aided tracking. COSPAS is an acronym for a Russian phrase meaning space system for search and distressed vessels.

⁸ The cost of tracking and silencing false alarms for ELTs alone was estimated to exceed \$2 million a year. *Smithsonian*, March 1987, 142. On September 27, 1988, *The Christian Science Monitor*, reporting the launch of the National Oceanic and Atmospheric Administration's (NOAA) new NOAA-11 satellite for use in an international satellite search and rescue program for ships and aircraft, noted that between \$900 and \$3,000 per hour is spent for fuel during a rescue operation. *The Christian Science Monitor*, September 27, 1988, 4.

⁹ Public Notice, "Commission Warns Against the Intentional Misuse of Emergency Locator Transmitters," December 29, 1988.

¹⁰ ICSAR is chaired by the U.S. Coast Guard and composed of other federal government agencies with an interest in search and rescue matters. ICSAR is the federal administrator of the National Search and Rescue Plan.

¹¹ See ICSAR Final Report, *supra*, 1.

¹² See, for example, *Report and Order*, Docket No. 19693, 39 Fed. Reg. 10143 (1974). (Special Requirements for Class A EPIRB)

¹³ For example, the Mount Hood Locator Unit is a homing system utilizing a small radio transmitter. The RECCO Detector, an avalanche victim locating device, is a detection system that passively and constantly monitors users. It consist of a transponder with a foil aerial and diode which receives a 917 MHz signal from the detector.

¹⁴ Satellite and rural cellular telephone communications offer some future possibilities in this area. For example, Geostar Corporation, which has been allocated spectrum and licensed in the radiodetermination satellite service, has received a patent on a vehicle location system using satellite technology that when implemented, will be able to pinpoint a customer's location within two to seven meters. This system is being geared for the consumer market. These two systems may not, however, be available for the purpose of emergency communications with hand-held portable units in remote areas for some time, especially in the case of rural cellular telephone systems. We invite comments on the potential of commercial satellite systems or rural cellular systems to meet the needs identified here quickly and at a reasonable cost.

¹⁵ See ICSAR Final Report, *supra*, 2.

¹⁶ See ICSAR Final Report, *supra*, 6.

¹⁷ There are currently three Personal Radio Services, the Citizens Band (CB) Radio Service, the General Mobile Radio Service (GMRS) and the Remote Control (R/C) Radio Service.

¹⁸ A letter of recognition from a governmental entity would accompany an application, and inform the Commission that the governmental entity recognizes the private organization as providing *bona fide* search and rescue services.

¹⁹ Mobile units would be authorized to operate on all mobile channels allotted to PELTS.

²⁰ See *Report and Order*, PR Docket No. 82-799, 48 Fed. Reg. 24884 (1983).

²¹ Recognizing that the high costs for licensing individual stations in the R/C and CB Radio Services may not justify the limited public interest benefits of such licensing, Congress amended the Communications Act of 1934 to permit us to grant authority to operate R/C and CB radio stations without individual licenses. See Public Law (P.L.) 97-259, Section 113(a), enacted September 13, 1982. See also 47 U.S.C. § 307(e).

²² See para 30, *infra*. We also ask for comments on whether we should limit users to reduce interference (i.e., license one provider per area). See paragraph 30.

²³ This is consistent with the current policy under the Communications Act of 1934, as amended, of exempting safety related radio services. See 47 C.F.R. § 1.1112(b).

²⁴ See ICSAR Final Report, *supra*, 3.

²⁵ Mr. Seymour's proposed use of the 72-76 MHz band was opposed by the AMA.

²⁶ See *Notice of Proposed Rule Making*, PR Docket 89-552.

²⁷ The lower half of these five frequency pairs (220-221 MHz), the base transmit side, is immediately adjacent to the upper half (221-222 MHz), which is reserved for mobile transmitting (base station receiving) in the private land mobile radio services. Consequently, there is the potential for interference from PELTS base station operations to private land mobile stations operating (receiving) on frequencies near 221 MHz and located in close proximity to a PELTS base station. Because PELTS base stations will be located primarily in remote areas, this should not be a problem. Nevertheless, we request comments on this matter.

²⁸ We emphasize again that PELTS is intended only to provide the communications capability needed. It is up to the governmental and private entities to provide the other half of the equation, watch and response systems, necessary to make this work. As the watch and response systems are provided a network of base stations will gradually build thereby increasing the efficiency and effectiveness of the PELTS.

²⁹ See *Report and Order*, Gen. Docket No. 87-14, 3 FCC Rcd 5287 (1988).

³⁰ See note 26, *supra*.

³¹ See 47 C.F.R. § 1.955.

³² *Report and Order*, Gen Docket No. 87-112, 3 FCC Rcd 905 (1987).

³³ See 47 C.F.R. § 87.261(c).

³⁴ See note 26, *supra*.

³⁵ For example, should a temperature range for mobile devices be specified, should an automatic identification be included in the transmission of the mobile device, should channel 10 have a separate switch to allow communication on other working channels while mobile device transmits a locating signal, and should we require a copy of the PELTS rules to be packaged with the equipment? We request commenters to provide specific values where appropriate.



APPENDIX C

MICHAEL C. TRAHOS, D.O.
GENERAL MEDICINE/FAMILY MEDICINE

(RECEIVED)

JAN 22 1990

Federal Communications Commission
Office of the Secretary

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Amendment of Parts 0, 1, 2 and 95
of the Commission's Rules regarding
the Establishment of a Personal
Emergency Locator Transmitter Service

PR Docket No. 89-599
RM-6681

COMMENTS FILED IN RESPONSE TO A NOTICE OF PROPOSED RULE MAKING

Submitted by:

Dr. Michael C. Trahos, D.O., NCE, CET
4600 King Street, Suite 4E
Alexandria, Virginia 22302

January 22, 1990

TABLE OF CONTENTS

<u>TITLE</u>	<u>PARAGRAPHS</u>
I. INTRODUCTION	1-2
II. COMMENTS	3-29
A. LICENSING REQUIREMENT	3-12
B. ELIGIBILITY	13-17
C. CHANNELING PLAN	18-23
D. TECHNICAL CONSIDERATIONS	24-29
III. CONCLUSION	30-32
IV. FOOTNOTES	Pg. 14-15



MICHAEL C. TRAHOS, D.O.
GENERAL MEDICINE/FAMILY MEDICINE

PRIVATE RADIO
BUREAU

JAN 22 4 27 PM '90

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Amendment of Parts 0, 1, 2 and 95) PR Docket No. 89-599
of the Commission's Rules regarding) RM-6681
the Establishment of a Personal)
Emergency Locator Transmitter Service)

Comments Filed in Response to a Notice of Proposed Rule Making

Submitted by: Dr. Michael Christ Trahos
Physician and Surgeon, D.O.
6613 Goldsboro Road
Falls Church, Virginia 22042

Date: January 22, 1990

I.

INTRODUCTION

1. Before the Federal Communications Commission (Commission) is a Notice of Proposed Rule Making (NPRM) concerning the Amendment of 47 CFR Parts 0, 1, 2, and 95 to establish a new Personal Emergency Locator Transmitter Service (PELTS). Designed for the short-distance personal and emergency communications needs of the general public 1/, this new PELTS is proposed to use a portion of the recently re-allocated 220-222 MHz band, spectrum previously underutilized by the Amateur Radio Service 2/ and which the Commission intends to put to more efficient and publicly-beneficial use in the Part 95 Personal Radio Services.3/

2. This commenter is a General/Family Medicine Physician and Surgeon and a certified First Class Telecommunications Engineer with 16 years experience in the telecommunications field. Commenter is currently licensed in the General Mobile Radio Service (GMRS), the Amateur Radio Service (ARS), the Business Radio Service (BRS), and the Special Emergency Radio Service (SERS). It is with having dealt extensively in the above radio services for personal, business, medical and emergency/public assistance that this commenter strongly supports this NPRM. However, it contains flaws which, if not addressed, will inhibit success of this proposal.

II.

COMMENTS

A. LICENSING REQUIREMENT

3. In creating this new radio service, the Commission, pursuant to the Communications Act of 1934 (as amended), is required to:

"(1) promote the safety of life and property;

(2) improve the efficiency of spectrum use and reduce the regulatory burden upon spectrum users, based upon sound engineering principles, user operational requirements, and marketplace demands;

(3) encourage competition and provide services to the largest feasible number of users;"^{4/} (Emphasis added)

4. The NPRM's proposed blanket licensing option 5/ is a beginning. However, it falls far short of providing service to the largest number of potential users.

5. Blanket licensing severely limits the efficient use of this spectrum by not providing for maximum flexible "user operational requirements."6/ Maximum flexibility would occur if "individuals could independently own and operate PELTS portable units."7/ But because the Commission is apparently unwilling to ask Congress to amend the Communications Act to allow for unlicensed operation in the PELTS,8/ the Commission has taken the incorrect position that "there is no need separately to license individual portable stations."9/

6. It would be difficult for Congress to amend the Communications Act of 1934 for a radio service that, as of yet, does not exist. But for the Commission not to state future intent to request such an amendment by Congress is not in the public interest.

7. The Commission must push for this amendment. The Report and Order in this proceeding must state that the Commission will request of Congress that it enact such an amendment. After Congressional amendment adoption, the Commission would automatically authorize the independent ownership and operation of

PELTS portables with no further action on the part of the Commission required (i.e. no further public proceedings necessary).

8. In the interim from the Report and Order adoption to Communications Act amendment enactment, the Commission could proceed with the blanket licensing proposal. But it must also simultaneously allow for the separate licensing of individual portable stations.

9. The precedent for this dual, individual/blanket licensing scheme already exists in the Part 90 Land Mobile Radio Services.^{10/} Pursuant to 47 CFR 90.179(c):

"Participants in the sharing arrangement may obtain a license for their own mobile units (including control points and/or control stations for control of the shared facility), or they may use mobile stations, and control stations or control points authorized to the license."
(Emphasis Added)

10. The rental service fees for PELTS portables will likely be high due to initial expensive system costs.^{11/} Under a blanket licensing option only, many individual end-users will not be willing to pay the expensive base station "rental fee" charges ^{12/} for the privilege of operating PELTS portables on the short-distance simplex frequencies authorized for personal non-emergency use.^{13/}

11. Base station licensees will also be reluctant to arbitrarily issue PELTS portables to the general public for short-distance simplex personal use, particularly when such use is outside the normal base station area of operation. This reluctance will be due to the licensee's responsibility to ensure "proper operation of the (PELTS portable) stations at all times" and the requirement the licensee to have unlimited "access to the (PELTS portable) equipment and be able to disable it."14/

12. A dual licensing scheme will create interim maximum spectrum utilization. It will promote the intended use of the PELTS, satisfying some of the personal and emergency communications needs of the general public without incurring enormous "rental fee" charges. Base station licensees, no longer required to be responsible for the equipment, would be more willing to rent PELTS portables to individual licensed users who repetitively lease from the licensee equipment intended for their personal use. Base station licensees would recoup their system costs by imposing "rental fees", for those without individual licenses, or by charging the individual licensed owners when actual base station emergency services are used.

B. ELIGIBILITY

13. "[T]o ensure that base station use is limited to distress and assistance communications"^{15/} (Emphasis added), the Commission proposes to "restrict eligibility to governmental entities and private organizations who provide a search and rescue service and are recognized as providing such eligibility by a governmental entity."^{16/} Restricting eligibility to only search and rescue service organizations is not in the public interest.

14. There exists many organizations nationwide that provide distress/assistance communications to the public but have limited or no search and rescue service capabilities. Two such national/international organizations, the American Radio Relay League, Inc. (ARRL) and Radio Emergency Associated Communications Teams, Inc. (REACT) provide distress/assistance communication services to the public and governmental/private search and rescue organizations through local affiliated/chartered member associations/teams.

15. In many regions, particularly isolated areas, the ARRL and/or REACT are the only "first line" distress/assistance communications entities that exist. The vast majority of these entities are well organized, with elaborate operational communications systems, and can rapidly mobilize to provide the

communications services necessary in the support of search and rescue operations.

16. Base station eligibility in PELTS must include all established entities that provide distress/assistance communications to the public, with or without search and rescue capabilities. To not give all such entities base station licensing eligibility would be a great waste of skilled man-power resources, particularly in isolated areas where no governmental/private search and rescue organizations exist or will never exist. In areas where search and rescue organizations elect not to participate in PELTS, these established private non-search and rescue distress/assistance communications entities would have established PELTS base stations to direct the search and rescue personnel.

17. Expanding PELTS base station eligibility to all established distress/assistance communications entities will maximize the coverage reception area for PELTS portables nationwide. Such expanded nationwide coverage will promote the intended use of PELTS and serve the public interest, convenience and necessity.

C. CHANNELING PLAN

18. The Commission expressed concern about the current channeling plan 17/ regarding "potential interference from PELTS base station operations to private land mobile stations operating (receiving) on frequencies near 221 MHz" 18/ However, potential interference would also exist to PELTS base stations (receiving) from Amateur Radio stations operating on frequencies near 222 MHz. 19/ Both of these interference potentials could be minimized if the proposed channeling plan were rearranged.

19. In the Part 95, Subpart D, Citizens Band (CB) Radio Service, the emergency communications frequency 27.065 MHz has been given the designation of "Channel 9". 20/ With much of the general public aware of CB radio and the use of CB "Channel 9" for emergencies, 21/ it would seem logical to maintain consistency in the Part 95 Personal Radio Services and designate the PELTS Emergency Notification/Homing frequency also as "Channel 9".

20. Interchanging the proposed channel 9 Short-distance (mobile) simplex frequency with the proposed channel 10 Emergency Notification/Homing frequency would achieve the objective of paragraph 14 supra. The latter interference concern of paragraph 13 supra would be significantly reduced by removing the important Emergency Notification/Homing frequency away from the upper edge of

band. The Short-distance (mobile) simplex frequency proposed as channel 9, reassigned to channel 10, would be more tolerant of interference and less likely to experience it.

21. As was the potential interference for the proposed channels 9/10, so is the potential interference problem for proposed channels 1/6 existing on the lower edge of their respective sub-bands. This too can be resolved by interchanging the channels 1/6 with channels 3/8. The Information (Base) channel 3 would be reassigned to channel 4. The Short-distance (Mobile) channel 4 would be reassigned to channel 1.

22. A new channel plan table depicting the above changes is as follows:

TABLE A

Frequency (MHz)	Channel Designator	Use
220.9775	1	Short-distance (Mobile)
220.9825	2	Assistance/Emergency (Base)
220.9875	3	Assistance/Emergency (Base)
220.9925	4	Information (Base)
220.9975	5	Short-distance (Mobile)

TABLE A (CONT.)

221.9775	6	Short-distance (Mobile)
221.9825	7	Assistance/Emergency (Mobile)
221.9875	8	Assistance/Emergency (Mobile)
221.9925	9	Emergency Notification/ Homing
221.9975	10	Short-distance (Mobile)

23. In this manner, the simplex Short-distance (mobile) frequencies would exist at the upper/lower edges of each sub-band, paired 1 MHz apart, protecting and reducing potential interference of the important PELTS Emergency Notification/Homing and Assistance/Emergency (Base/Mobile) stations with the Private Land Mobile and Amateur Radio Stations.

D. Technical Considerations

24. Besides Emission Mask, Frequency Tolerance, and Transmitter Power, the Commission needs to strongly consider the requirement for each PELTS portable to incorporate a user undefeatable "Automatic Transmitter Identifications System" (ATIS).

25. ATIS is a "unique, unchangeable identifying number assigned to each transmitter at time of manufacture plus some correlation of the number to a data base identifying the licensee (user), such as a call letter list."22/ As a physician, ATIS in PELTS has a more important role besides Field Operations Bureau enforcement, that of recalling from a data base any significant medical history of a potential victim.

26. For example, an insulin-dependent diabetic, on an excursion through an isolated wilderness area activates his PELTS portable on the Emergency Notification/Homing frequency due to a developing syncopal episode from unanticipated acute hypoglycemia (insulin shock).

27. A PELTS base station, receiving the emergency homing signal, recalls the ATIS data base which indicates that this victim has a medical history of Insulin-Dependent Diabetes Mellitus. The rescue team, made knowledgeable of the victim's diabetic condition, take with them a special supply of intravenous 50% dextrose water. Upon reaching the now comatose individual the rescue team administers the life-saving 50% dextrose water intravenously and revive the victim.

28. If it were not for ATIS, the PELTS base station could not have accessed the data base containing the victim's medical history. The search and rescue team, in turn, may not have had the proper medical supplies to handle the emergency upon reaching the victim. Therefore without ATIS, it is very likely that this victim would have perished.

29. ATIS is a very important technical feature which must be required in PELTS portables. Its incorporation will be in the public interest with minimal cost incurred.

III.

CONCLUSION

30. Unlicensed portable operations is eventually what is most needed for PELTS. The Commission's blanket licensing option alone falls short of complying with its Congressional responsibility to provide services to the largest number of users. The dual, individual/blanket, licensing proposal outlined above allows for the maximum flexibility of spectrum use until a Congressional amendment to the Communications Act of 1934 can be enacted.

31. It is strongly recommended that the Commission adopt a PELTS dual licensing scheme. Additionally, the Commission needs to state that it will request of Congress that it amend the Communications Act of 1934 to allow for the unlicensed operation of

portable PELTS stations. The Report and Order to this proceeding must reflect this intent with further editorial stating that when the Communications Act of 1934 is eventually amended, automatic unlicensed portable PELTS authorization will be allowed without further Commission actions/proceedings necessary.

32. Adoption of the above recommendations, regarding dual individual/blanket licensing, expanded base station eligibility, revised channelization and ATIS, will increase the efficiency of PELTS spectrum utilization, reduce Commission administrative costs while fulfilling Congressional directives and be in the public interest.

Respectfully submitted


Dr. Michael C. Trahos, D.O., NCE, CET

MCT/mct

IV. FOOTNOTES

- 1/ NOTICE OF PROPOSED RULE MAKING, PR Docket No. 89-599, FCC 89-342, Appendix, Paragraph 21.
- 2/ REPORT AND ORDER, General Docket No. 87-14, FCC 88-266, Paragraph 43. See also PETITION FOR RULE MAKING, RM-6990, Dr. Michael C. Trahos, May 9, 1989, in general.
- 3/ Ibid, Paragraph 56 and NOTICE OF PROPOSED RULE MAKING, PR Docket No. 89-599, FCC 89-342, Paragraph 17 and 19.
- 4/ COMMUNICATIONS ACT OF 1934 (as amended), Section 332 (a), [47 U.S.C. 332].
- 5/ NOTICE OF PROPOSED RULE MAKING, PR Docket No. 89-599, FCC 89-342, Paragraph 20.
- 6/ COMMUNICATIONS ACT OF 1934 (as amended), Section 332 (a)(2), [47 U.S.C. 332].
- 7/ NOTICE OF PROPOSED RULE MAKING, PR Docket No. 89-599, FCC 89-342, Paragraph 20.
- 8/ Ibid.
- 9/ Ibid, at Paragraph 19
- 10/ CODE OF FEDERAL REGULATIONS, Title 47, Part 90, Section 90.179.
- 11/ NOTICE OF PROPOSED RULE MAKING, PR Docket No. 89-599, FCC 89-342, Paragraph 15.
- 12/ Ibid, at Paragraph 20
- 13/ Ibid, at Paragraph 28 and Table 1.
- 14/ Ibid, Appendix, Paragraph 21, Section 95.761 (a) & (b).
- 15/ Ibid, Text, Paragraph 18.
- 16/ Ibid.
- 17/ Ibid, Paragraph 28, Table 1

- 18/ Ibid, Footnote 27
- 19/ REPORT AND ORDER, General Docket No. 87-14, FCC 88-266, Paragraph 1.
- 20/ CODE OF FEDERAL REGULATIONS, Title 47, Part 95, Subpart D, Section 95.407(b).
- 21/ NOTICE OF PROPOSED RULE MAKING, PR Docket No. 89-599, FCC 89-342, Paragraph 10.
- 22/ NOTICE OF PROPOSED RULE MAKING, GN Docket No. 86-337, FCC 86-356, Paragraph 2.

104TH CONGRESS
1ST SESSION

H. R. 963

To amend the Communications Act of 1934 in order to permit recreational radio operations without radio licenses.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 15, 1995

Mr. STUPAK (for himself and Mr. FIELDS of Texas) introduced the following bill; which was referred to the Committee on Commerce

A BILL

To amend the Communications Act of 1934 in order to permit recreational radio operations without radio licenses.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION. 1. LICENSING OF AVIATION, MARITIME, AND PER-**
4 **SONAL RADIO SERVICES BY RULE.**

5 Section 307(e) of the Communications Act of 1934
6 (47 U.S.C. 307(e)) is amended to read as follows:

7 “(e)(1) Notwithstanding any license requirement es-
8 tablished in this Act, if the Commission determines that
9 such authorization serves the public interest, convenience,
10 and necessity, the Commission may by rule authorize the

1 operation of radio stations without individual licenses in
2 the following radio services: (A) the personal radio serv-
3 ices; (B) the aviation radio service for aircraft stations op-
4 erated on domestic flights when such aircraft are not oth-
5 erwise required to carry a radio station; and (C) the mari-
6 time radio service for ship stations navigated on domestic
7 voyages when such ships are not otherwise required to
8 carry a radio station.

9 “(2) Any radio station operator who is authorized by
10 the Commission to operate without an individual license
11 shall comply with all other provisions of this Act and with
12 rules prescribed by the Commission under this Act.

13 “(3) For purposes of this subsection, the terms ‘per-
14 sonal radio services’, ‘aircraft station’, and ‘ship station’
15 shall have the meanings given them by the Commission
16 by rule, except that the term ‘personal radio services’ shall
17 not include the amateur service.”.